## RULE 474 Fuel Burning Equipment - Oxides Of Nitrogen

(a) A person shall not discharge into the atmosphere from any non-mobile fuel burning equipment, oxides of nitrogen, expressed as nitrogen dioxide (NO<sub>2</sub>), calculated at three percent oxygen on a dry basis averaged over a minimum of 15 consecutive minutes, in excess of the concentrations shown in the following table:

Maximum Gross Heat Input Rate in Millions Per Hour							
Fuel	Kilogram-	British Thermal	Kilogram-	British Thermal	Kilogram-	British Thermal	
	Calories	Units	Calories	Units	Calories	Units	
	140 or more	555 or more	450 or more but	1786 or more	540 or	2143 or more	
	but less than	than 1786	less than 540	than 2143	more		
	450						
Gas	$300 \text{ ppm NO}_{X}$		225 ppm NO <sub>X</sub>		125 ppm NO <sub>X</sub>		
Liquid or Solid	400 ppm NO <sub>X</sub>		325 ppm NO <sub>X</sub>		225 ppm NO <sub>X</sub>		

(b) A person shall not discharge into the atmosphere from steam generating equipment, oxides of nitrogen dioxide (NO<sub>2</sub>), calculated at three percent oxygen on dry basis averaged over a minimum of 15 minutes, in excess of the concentrations shown in the following table:

Maximum Gross Heat Input Rate in Millions per Hour					
	Kilogram-Calories	<b>British Thermal Units</b>			
	140 or more	555 or more			
Gas	$125 \text{ ppm NO}_{x}$				
Liquid or Solid	$225 \text{ ppm NO}_{X}$				

The provisions of this subsection shall be effective only in San Bernardino and Riverside Counties.

(c) When more than one type of fuel is used, the allowable concentration shall be determined by proportioning the gross heat input for each fuel to its respective allowable concentration.

**AVAQMD Rule 474** 474-1

- (d) Notwithstanding the provisions of subsection (a), a person operating a supercritical steam generating unit with a maximum gross heat input exceeding 2143 million BTUs per hour may discharge oxides of nitrogen into the atmosphere not to exceed 400 ppm calculated at three percent oxygen on a dry basis averaged over a minimum of 15 consecutive minutes during the pressure ramp periods of the boiler startup operations.
- (e) For the purpose of this rule:
  - (1) FUEL BURNING EQUIPMENT shall be comprised of the minimum numbers of boilers, furnaces, jet engines or other fuel burning equipment, the simultaneous operations of which are required for the production of useful heat or power.
  - (2) A SUPERCRITICAL STEAM GENERATING UNIT is a steam boiler which normally operates above the water critical temperature (705°F) and critical pressure (3210 psia) where water can exist only in the gaseous phase.
  - (3) PRESSURE RAMPS are two steam pressure build-up periods, after a heat-soak period at 400 psia in the startup of a supercritical steam generating unit:
    - (A) Low pressure, 400 psia to 1000 psia, and
    - (B) High pressure, 1000 psia to 3500 psia.

[SIP: Submitted as amended 12/4/81 on 11/26/96; Approved \_\_\_\_\_\_\_, \_\_\_\_\_\_, 40 CFR 52.220(c)(121)(i)(A); approved 9/8/78, 43 FR 40011, 40 CFR 52.220(c)(39)(iii)(C); Approved 6/14/78, 43 FR 25684, 40 CFR 52.220(c)(37)(i)(A)]